

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-10 and 20-28 are pending in the present application. Claims 1, 10, 20, and 28 are amended by the present amendment.

In the outstanding Office Action, Claims 1-4, 6-8, 10, 20-23, and 25-28 were rejected under 35 U.S.C. § 103(a) as unpatentable over Nepela et al. (U.S. Patent No. 6,078,479, herein “Nepela”) in view of Hayashi et al. (U.S. Patent No. 6,490,139, herein “Hayashi”), and Claims 5 and 24 were rejected under 35 U.S.C. § 103(a) as unpatentable over Nepela in view of Hayashi and Sasaki et al. U.S. Patent No. 6,577,475, herein “Sasaki”).

Regarding the rejection of Claims 1-4, 6-8, 10, 20-23, and 25-28 under 35 U.S.C. § 103(a) as unpatentable over Nepela in view of Hayashi, independent Claims 1, 10, 20, and 28 have been amended to recite that an insulation layer is disposed between each of a pair of biasing films and a magnetoresistance effect film. The claim amendments find support in Figures 1 and 2 and in their corresponding description in the specification. No new matter has been added.

Briefly recapitulating, amended Claim 1 is directed to a magnetic reproducing head having a magnetic gap at a medium-facing surface. The magnetic head includes, *inter alia*, a pair of magnetic yokes, a magnetoresistance effect film, an insulation layer, and a pair of biasing films. The magnetic gap is formed between the pair of magnetic yokes and one of the pair of magnetic yokes has a rear portion recessed from the medium-facing surface. The magnetoresistance effect film is recessed from the medium-facing surface and is disposed between the pair of magnetic yokes. The rear portion of the one of the pair of the magnetic yokes and the magnetoresistance effect film are aligned in a track length direction. The

insulation layer is disposed between each of the pair of magnetic yokes and the magnetoresistance effect film and also between each of the pair of the biasing films and the magnetoresistance effect film. The pair of biasing films is recessed from the medium-facing surface and the rear portion of the one of the pair of magnetic yokes and the pair of biasing films are aligned in the track width direction. Independent Claims 10, 20, and 28 have been amended similar to Claim 1.

In a non-limiting example, Figure 1 show a cross-sectional view of the magnetic reproducing head along the track width direction. Figure 1 shows the pair of magnetic yokes 1 and 2, and the magnetoresistance effect film 9. In another non-limiting example, Figure 2 shows the insulator layer 10 and the pair of biasing films 3a and 3b in a cross-sectional view along the track length direction.

The outstanding Office Action asserts in the paragraph bridging pages 2 and 3 that Nepela shows in Figures 1-3 a magnetic had having a pair of magnetic yokes P1 + P2A and P2B and a magnetoresistance effect film 19 recessed from a medium-facing surface. In particular, the outstanding Office Action states in the same paragraph that a rear portion of one of the pair of magnetic yokes and the magnetoresistance effect film of Nepela are aligned in a track **width** direction<sup>1</sup> as shown in Reference Figure A, enclosed herewith. It is noted that Reference Figure A corresponds to Figure 1 of Nepela.

However, Applicants note that each independent claim recites “the rear portion of the one of the pair of magnetic yokes and the magnetoresistance effect film being aligned in a track **length** direction.” (Emphasis added). To the contrary, the outstanding Office Action refers, as noted above, to a track width direction in Nepela. Hayashi does not cure the deficiencies noted above regarding Nepela.

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<sup>1</sup> Outstanding Office Action, page 3, lines 9-11.

Thus, at least for this reason, it is respectfully submitted that the outstanding Office Action has not addressed each claimed feature, and thus, independent Claims 1, 10, 20, and 28 and each of claims depending therefrom patentably distinguish over Nepela and Hayashi, either alone or in combination.

After further considering Figures 1-3 of Nepela, Applicants believe that a section view taken along the line D-D' shown in Reference Figure A is as shown in enclosed Reference Figure B. As can be seen in Reference Figure B, the rear portion of the magnetic yoke P1 or P2 (in a center portion 24) and the magnetoresistance film 19 are **not** aligned in the track width direction as required by Claims 1, 10, 20, and 28.

Thus, even assuming that Hayashi discloses biasing films and a magnetoresistance film aligned in the track width direction as asserted by the outstanding Office Action, Applicants respectfully submit that one of ordinary skill in the art would not be motivated to combine the teachings of Nepela and Hayashi to arrive at the claimed devices.

Hayashi shows in Figure 16 that a magnetoresistance effect film 45 and a hard bias layer 46 are adjacent to each other, and that a magnetic bias is applied from the bias layer 46 to the magnetoresistance effect film 45. However, the claimed bias films 3a and 3b are disposed on a side surface of the wide rear portion 1b (having the second width) of the magnetic yoke 1 as shown in Figure 1, the claimed magnetoresistance effect film 9 is separate from the claimed bias films 3a and 3b, and the claimed insulation layer 10 is disposed between each of the claimed bias films 3a and 3b and the claimed magnetoresistance effect film 9. Thus, the claimed structure advantageously may achieve biasing of the wide rear portion 1b while preventing biasing of the magnetoresistance effect film 9.

Therefore, Applicants respectfully submit that neither Nepela nor Hayashi teaches or suggests an insulation layer disposed between each yoke of the pair of magnetic yokes and

the magnetoresistance effect film and also between each of the pair of the biasing films and the magnetoresistance effect film, as required by amended Claims 1, 10, 20, and 28.

Accordingly, it is respectfully submitted that independent Claims 1, 10, 20, and 28 and each of the claims depending therefrom patentably distinguish over Nepela and Hayashi, either alone or in combination.

Regarding the rejection of dependent Claims 5 and 24 under 35 U.S.C. § 103(a) as unpatentable over Nepela in view of Hayashi and Sasaki, that rejection is respectfully traversed for the following reasons. Applicants have considered Sasaki but Sasaki does not overcome the deficiencies of Nepela and Hayashi discussed above. In addition, Claims 5 and 24 depend from independent Claims 1 and 20, respectively, which are believed to be allowable as noted above. Accordingly, it is respectfully submitted that dependent Claims 5 and 24 are also allowable.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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